

Ecole "Geant4 2020"
de l'IN2P3
ORSAY, 23 au 27 novembre 2020

November 23	10:30	Presentation de l'école	Ivana Hrivnacova (IJCLab)
	10:45	Introduction in Geant4, Kernel	Marc Verderi (LLR), Ivana Hrivnacova (IJCLab)
		Exercise: <i>Building Geant4 Application</i>	all
	12:30	Déjeuner	
	14:00	Geometry & Materials	Ivana Hrivnacova (IJCLab), Igor Semeniouk (LLR)
		Exercise: <i>Adding more realistic geometry</i>	all
	15:30	Pause	
16:00	User Documents, User Interface	Ivana Hrivnacova (IJCLab), Igor Semeniouk (LLR)	
	Exercise: <i>Visualization attributes, inspecting geometry</i>	all	
18:00	fin de session		

November 24	9:00	Primary Particles	Marc Verderi (LLR)
		Exercise: <i>Primary generator class</i>	all
	10:30	Pause	
	11:00	Random number generators, Visualization	Marc Verderi (LLR), Igor Semeniouk (LLR)
		Exercise: <i>Random numbers, extending GUI</i>	all
	12:30	Déjeuner	
	14:00	Physics overview, physics list	Marc Verderi (LLR)
		Exercise: <i>Adding physics list, exploring physics processes</i>	all
15:30	Pause		
16:00	Physics processes, cuts, regions	Marc Verderi (LLR)	
	Exercise: <i>Cuts, regions</i>	all	
18:00	fin de session		

November 25	9:00	User Actions and Scoring	Marc Verderi (LLR), Ivana Hrivnacova (IJCLab)
		Exercise: <i>Complete tracker detector</i>	all
	10:30	Pause	
	11:00	Scoring, More on Visualization	Igor Semeniouk (LLR), Ivana Hrivnacova (IJCLab)
		Exercise: <i>Complete calorimeter detector, drawing hits</i>	all
	12:30	Déjeuner	
	14:00	Analysis, More on Scoring	Ivana Hrivnacova (IJCLab)
		Exercise: <i>Add histograms, ntuples</i>	all
15:30	Pause		
16:00	More on User Interface	Igor Semeniouk (LLR)	
	Exercise: <i>Use of G4GenericMessenger</i>	all	
18:00	fin de session		

November 26	9:00	Multithreading – 1	Ivana Hrivnacova (IJCLab)
		Exercise: <i>Migrate an application in multithreading</i>	all
	10:30	Pause	
	11:00	Multithreading – 2	Ivana Hrivnacova (IJCLab), Igor Semeniouk (LLR)
		Exercise: <i>Configuring MT application, data race</i>	all
	12:30	Déjeuner	
	14:00	More on Geometry, Geometry persistency	Ivana Hrivnacova (IJCLab)
		Exercise: <i>Adding magnetic field, upgrade of geometry</i>	all
15:30	Pause		
16:00	More on Physics – 1	Marc Verderi (LLR)	
	Exercise: <i>Energy deposit depending on particle species</i>	all	
18:00	fin de session		
20:00	Dîner de l'école / Restaurant à préciser		

November 27	9:00	More on Physics – 2	Marc Verderi (LLR)
		Exercise: <i>Production of secondaries with cuts</i>	all
	10:30	Pause	
	11:00	Choosing Physics List, More on Kernel	Marc Verderi (LLR), Ivana Hrivnacova (IJCLab)
		Exercise: <i>Export/import geometry in GDML</i>	all
	12:30	Déjeuner	
	14:00	Event Biasing	Marc Verderi (LLR)
Exercise: <i>Shielding</i>		all	
15:30	Closing session	all	
16:00	fin de session		